

Predicted amino acid sequence of human BLNK-1: 1-456

MDKLNKITTVPASQKLRLQKQMVHDIKNNEGGIMNKIKLKVKAAPPVPRRDYASESPADEEEQ  
WSDDFDSDYENPDEHSDSEMYVMPAEENADDSYEPPVEQETRPVHPALPFARGEYIDNRSSQ  
RHSPPFSKTLPSKPSWPSEKARLTSTLPALTALQKPQVPKPKGLLEDEADYVVFVEDNDENY  
IHPTESSPPPEKAPMVNRSTKPNSSTPASPPGTASGRNSGAWETKSPPPAAPSPPLPRAGKKP  
TTPLKTTTPVASQQNASSVCEEKPIPAERHRGSSHRQEAQSPVFPQAQKQIHQKPIPLPRFTE  
GGNPTVDGGLPIFSSNSTISEQEAGVLCCKPWYAGACDRKSAEEALHRSNKGSGFLIRKSSGHD  
SKQPYTLVVFENKRVYNI PVRFIEATKQYALGRKNGEYFGSVAEIIRNHQHSPLVLIDSQN  
NTKDSTRLLKYAVKVS\*

Fig. 1

## cDNA Sequence of human.BLNK-1:

Open Reading Frame: 154 - 1524

CCTTCGTGGCCGCAGCCTGCACTCTCAGAAATCAGACTTGAGTGGCCGGAACCCCTTGAGACCA  
GAGGCTTACCATGCTGCTCCCTAGGAGGGCCAGGAAGTCTGACGTGACCACTGGACAGTTAT  
TCGTGTCTCTTACAATTACCAAACAGAATGGACAAGCTTAATAAAATAACCGTCCCCGCCAGT  
CAGAAGTTGAGGCAGCTTCAAAAGATGGTCCATGATATTAAAAACAATGAAGGTGGAATAATG  
AATAAAATCAAAAAGCTAAAAGTCAAAGCACCTCCAAGTGTTCCTCGAAGGGACTACGCTTCA  
GAGAGCCCCGCTGACGAAGAGGAGCAGTGGTCCGATGACTTTGACAGCGACTATGAAAATCCA  
GATGAGCACTCGGACTCAGAGATGTACGTGATGCCCCGCCGAGGAGAACGCTGATGACAGCTAC  
GAGCCGCCTCCAGTAGAGCAGGAAACCAGGCCGCTTCAACCCAGCCCTGCCCTTCGCCAGAGGC  
GAGTATATAGACAATCGATCAAGCCAGAGGCATTCCCCACCCTTCAGCAAGACACTTCCCAGT  
AAGCCCAGCTGGCCTTCAGAGAAAGCAAGGCTCACCTCCACCCTGCCGGCCCTGACTGCTTTG  
CAGAAACCTCAAGTCCCACCCAAACCCAAAGGCCTCCTTGAGGATGAGGCTGATTATGTGGTC  
CCCGTGGAAGATAATGATGAAAACCTATATTCATCCCACAGAAAGCAGTTCACCTCCACCTGAA  
AAAGCTCCCATGGTGAATAGATCAACCAAGCCAAATTCCTCAACGCCCGCCTCTCCTCCAGGA  
ACAGCTTCAGGTTCGAAACAGTGGGGCCTGGGAAACCAAGTCACCTCCACCAGCTGCACCATCC  
CCGTTGCCACGGGCCGGGAAAAAACCAACGACACCACTGAAGACAACCTCCAGTTGCCTCTCAA  
CAGAATGCTTCAAGTGTGTTGTGAAGAAAAACCTATACCTGCTGAACGCCACCGAGGGTCAAGT  
CACAGACAAGAAGCTGTGCAGTCACCAGTGTTCCTCCTGCCCAGAAACAAATCCACCAAAAA  
CCCATACCTCTGCCAAGATTTACAGAAGGGGGGAAACCCAACTGTGGATGGGCCCCCTACCCAGC  
TTTTCATCTAATTCCACTATTTTCAGAACAGGAAGCTGGCGTTCTCTGCAAGCCATGGTATGCT  
GGAGCCTGTGATCGAAAGTCTGCTGAAGAGGCATTGCACAGATCAAACAAGGATGGATCATTT  
CTTATTCGGAAAAGCTCTGGCCATGATTCCAAACAACCATATACACTAGTTGTATTCTTTAAT  
AAGCGAGTATATAATATTCCTGTGCGATTTATTGAAGCAACAAAACAATATGCCTTGGGCAGA  
AAGAAAAATGGTGAAGAGTACTTTGGAAGTGTGCTGAAATCATCAGGAATCATCAACATAGT  
CCTTTGGTTCTTATTGACAGTCAGAATAACACAAAAGATTCCACCAGACTGAAGTATGCAGTT  
AAAGTTTCATAAAGGGGGGAAAAAAAAGATCAATACCATTGCTTCAGACACTTTCCCAAAGTTT  
CTCCTTTTGAGAAAAAGTCCCAAACCTTCATATTTTGGATTATGAATCATCCAGTAATAAAAT  
GGAAGATGGAGTCAGCTATTGAAGTGGTCATCCATTTCTTTTAAAGAAGCTCATGTGGACTTG  
TTCTATTGCCTGACCTGATGAACTGTTAATATCTGGTGAGGTTGAGTTATCATGCTACTAATA  
TTTTCCAAATAAATATTTTATTTTAAAAAATAAAAAAAAAA

Fig. 2

3/9

## OPEN READING FRAME OF HUMAN BLNK 2

Met Asp Lys Leu Asn Lys Ile Thr Val Pro Ala Ser Gln Lys Leu Arg  
 1 5 10 15  
 His Ile Lys Asn Asn Glu Gly Gly Ile Met Asn Lys Ile Lys Lys Leu  
 20 25 30  
 Lys Val Lys Ala Pro Pro Ser Val Pro Arg Arg Asp Tyr Ala Ser Glu  
 35 40 45  
 Ser Pro Ala Asp Glu Glu Glu Gln Trp Ser Asp Asp Phe Asp Ser Asp  
 50 55 60  
 Tyr Glu Asn Pro Asp Glu His Ser Asp Ser Glu Met Tyr Val Met Pro  
 65 70 75 80  
 Ala Glu Glu Asn Ala Asp Asp Ser Tyr Glu Pro Pro Pro Val Glu Gln  
 85 90 95  
 Glu Thr Arg Pro Val His Pro Ala Leu Pro Phe Ala Arg Gly Glu Tyr  
 100 105 110  
 Ile Asp Asn Arg Ser Ser Gln Arg His Ser Pro Pro Phe Ser Lys Thr  
 115 120 125  
 Leu Pro Ser Lys Pro Ser Trp Pro Ser Glu Lys Ala Arg Leu Thr Ser  
 130 135 140  
 Thr Leu Pro Ala Leu Thr Ala Leu Gln Lys Pro Gln Val Pro Pro Lys  
 145 150 155 160  
 Pro Lys Gly Leu Leu Glu Asp Glu Ala Asp Tyr Val Val Pro Val Glu  
 165 170 175  
 Asp Asn Asp Glu Asn Tyr Ile His Pro Thr Glu Ser Ser Ser Pro Pro  
 180 185 190  
 Pro Glu Lys Ala Pro Met Val Asn Arg Ser Thr Lys Pro Asn Ser Ser  
 195 200 205  
 Thr Pro Ala Ser Pro Pro Gly Thr Ala Ser Gly Arg Asn Ser Gly Ala  
 210 215 220  
 Trp Glu Thr Lys Ser Pro Pro Pro Ala Ala Pro Ser Pro Leu Pro Arg  
 225 230 235 240

Ala Gly Lys Lys Pro Thr Thr Pro Leu Lys Thr Thr Pro Val Ala Ser  
245 250 255

Gln Gln Asn Ala Ser Ser Val Cys Glu Glu Lys Pro Ile Pro Ala Glu  
260 265 270

Arg His Arg Gly Ser Ser His Arg Gln Glu Ala Val Gln Ser Pro Val  
275 280 285

Phe Pro Pro Ala Gln Lys Gln Ile His Gln Lys Pro Ile Pro Leu Pro  
290 295 300

Arg Phe Thr Glu Gly Gly Asn Pro Thr Val Asp Gly Pro Leu Pro Ser  
305 310 315 320

Phe Ser Ser Asn Ser Thr Ile Ser Glu Gln Glu Ala Gly Val Leu Cys  
325 330 335

Lys Pro Trp Tyr Ala Gly Ala Cys Asp Arg Lys Ser Ala Glu Glu Ala  
340 345 350

Leu His Arg Ser Asn Lys Asp Gly Ser Phe Leu Ile Arg Lys Ser Ser  
355 360 365

Gly His Asp Ser Lys Gln Pro Tyr Thr Leu Val Val Phe Phe Asn Lys  
370 375 380

Arg Val Tyr Asn Ile Pro Val Arg Phe Ile Glu Ala Thr Lys Gln Tyr  
385 390 395 400

Ala Leu Gly Arg Lys Lys Asn Gly Glu Glu Tyr Phe Gly Ser Val Ala  
405 410 415

Glu Ile Ile Arg Asn His Gln His Ser Pro Leu Val Leu Ile Asp Ser  
420 425 430

Gln Asn Asn Thr Lys Asp Ser Thr Arg Leu Lys Tyr Ala Val Lys Val  
435 440 445

Ser

Fig. 3B

## cDNA OF HUMAN BLNK 2

035544-02399

CCTTCGTGGC CGCAGCCTGC ACTCTCAGAA ATCAGACTTG AGTGGCCGGA ACCCTTGAGA 60  
CCAGAGGCTT ACCATGCTGC TCCCTAGGAG GGCCAGGAAC TGCTGACGTG ACCACTGGAC 120  
AGTTATTCGT GTCTCTTACA ATTACCAAAC AGAATGGACA AGCTTAATAA AATAACCGTC 180  
CCCGCCAGTC AGAAGTTGAG GCATATTAAA AACAATGAAG GTGGAATAAT GAATAAAATC 240  
AAAAAGCTAA AAGTCAAAGC ACCTCCAAGT GTTCCTCGAA GGGACTACGC TTCAGAGAGC 300  
CCCGCTGACG AAGAGGAGCA GTGGTCCGAT GACTTTGACA GCGACTATGA AAATCCAGAT 360  
GAGCACTCGG ACTCAGAGAT GTACGTGATG CCCGCCGAGG AGAACGCTGA TGACAGCTAC 420  
GAGCCGCCTC CAGTAGAGCA GGAAACCAGG CCGGTTCAAC CAGCCCTGCC CTTGCCAGA 480  
GGCGAGTATA TAGACAATCG ATCAAGCCAG AGGCATTCCC CACCCTTCAG CAAGACACTT 540  
CCCAGTAAGC CCAGCTGGCC TTCAGAGAAA GCAAGGCTCA CCTCCACCCT GCCGGCCCTG 600  
ACTGCTTTGC AGAAACCTCA AGTCCCACCC AAACCCAAAG GCCTCCTTGA GGATGAGGCT 660  
GATTATGTGG TCCCCGTGGA AGATAATGAT GAAACTATA TTCATCCCAC AGAAAGCAGT 720  
TCACCTCCAC CTGAAAAAGC TCCCATGGTG AATAGATCAA CCAAGCCAAA TTCCTCAACG 780  
CCCGCCTCTC CTCCAGGAAC AGCTTCAGGT CGAAACAGTG GGGCCTGGGA AACCAAGTCA 840  
CCTCCACCAG CTGCACCATC CCCGTTGCCA CGGGCCGGGA AAAAACCAAC GACACCACTG 900  
AAGACAACCTC CAGTTGCCTC TCAACAGAAT GCTTCAAGTG TTTGTGAAGA AAAACCTATA 960  
CCTGCTGAAC GCCACCGAGG GTCAAGTCAC AGACAAGAAG CTGTGCAGTC ACCAGTGTTT 1020  
CCTCCTGCCC AGAAACAAAT CCACCAAAAA CCCATACCTC TGCCAAGATT TACAGAAGGG 1080  
GGAAACCCAA CTGTGGATGG GCCCCTACCC AGCTTTTCAT CTAATTCCAC TATTTAGAA 1140  
CAGGAAGCTG GCGTTCTCTG CAAGCCATGG TATGCTGGAG CCTGTGATCG AAAGTCTGCT 1200  
GAAGAGGCAT TGCACAGATC AAACAAGGAT GGATCATTTT TTATTTCGAA AAGCTCTGGC 1260  
CATGATTCCA AACAACCATA TACACTAGTT GTATTCTTTA ATAAGCGAGT ATATAATATT 1320  
CCTGTGCGAT TTATTGAAGC AACAAAACAA TATGCCTTGG GCAGAAAGAA AAATGGTGAA 1380  
GAGTACTTTG GAAGTGTTGC TGAAATCATC AGGAATCATC AACATAGTCC TTTGGTTCTT 1440  
ATTGACAGTC AGAATAACAC AAAAGATTCC ACCAGACTGA AGTATGCAGT TAAAGTTTCA 1500  
TAAAGGGGGA AAAAAAGAT CAATACCATT GCTTCAGACA CTTTCCCAA GTTTCTCCTT 1560

Fig. 4A

6/9

TTGAGAAAA GTCCCAAAC TTCATATTTT GGATTATGAA TCATCCAGTA ATAAAATGGA 1620  
AGATGGAGTC AGCTATTGAA GTGGTCATCC ATTTCTTTT AAGAAGCTCA TGTGGACTTG 1680  
TTCTATTGCC TGACCTGATG AACTGTTAAT ATCTGGTGAG GTTGAGTTAT CATGCTACTA 1740  
ATATTTTCCA AATAAATATT TTTATTTTAA AAAAAAAAAA AAAAA 1785

Fig. 4B

652240 455555

Open reading frame of mouse BLNK.

MDKLNKITTVPASQKLRLQLQKMVHDIKNNEGIMDKIKLKVKGPPSVPRRDYALDSPAD  
 EEEQWSDDFDSDYENPDEHSDSEMYVMPAEETGDDSYEPPEAEQQTRVVHPALPFTRGEY  
 VDNRSQRHSPFSTLPSKPSWPSAKARLASTLPAPNSLQKPQVPPKPKDLLEADYV  
 VPVEDNDENYIHPRESSPPAEKAPMVNRSTKPNSSSKHMSPPGTVAGRNSGVWDSKS  
 SLPAAPSPPLPRAGKKPATPLKTTTPVPLPNASNVCEKVPVPAERHRGSSHRQDTVQSPVF  
 PPTQKPVHQKPVPLPRFPEAGSPAADGPFHSFPFNLTFADQEGELLGKWPYAGACDRKFA  
 EEALHRSNKDGSLIRKSFCHDSKQPYTLVAFFNKRNVNIPVRFIEATKQYALGKKKNKE  
 EYFGSVVEIVNSHQHNPLVLDSQNNTKDSTRCLKYAVKVS

Fig. 5



## cDNA of mouse BLNK.

CTGTGGTGTGCTCGCAGAAAGTCAGTTCAGTGGCTTGAGTTCITGAGGCCAGAGCCCTT  
ACCATGCTGCTCCCAGGAAGTCCAGGAGCTGCTGACACCCCCCTGGACAGCGACAC  
ATCCTCTCAAGAAATGGACAAGCTGAATAAGATAACTGTCCCTGCCAGCCAGA  
AGCTGAGACAGCTTCAAAAGATGGTCCATGATATTAAAGAAACAATGAAGGTGGAAT  
AATGGACAAGATAAAAAGCTAAAGTCAAGGCCCTCCAAAGTGTTCCTCAGAAGG  
GACTATGCATTAGACAGCCCTGCAGATGAAGAGGAGCAGTGGTCAGATGACTTCGA  
CAGTGAATGAAAATCCAGATGAACATTCGGACTCCGAGATGTATGTGATGCCTGC  
CGAGGACGGGCGACGATTCCTATGAACCGCTCCCGCTGAGCAGCAGACACGGGT  
GGTCCATCCAGCCCTGCCCTTACGAGGGCGAGTATGTAGATAATCGATCCAGCCA  
GGGCACTCTCCGCTTCAGCAAGACACTTCCCAAGTAAAGCCAGCTGGCCTTCAGCG  
AAAGCGAGGCTGGCTCCACTCTGCCAGCCCCCACTCTACAGAAAGCCTCAAGTCC  
CCCCAAGCCCAAGACCTCCTTGAGGATGAGGCTGATTATGTGGTCCCTGTGGAAG  
ATAACGATGAATACTATATCCATCCAGAGAAAGTAGCCCGCCGCTGCTGAGAAG  
GCTCCCATGGTGAATAGATCAACCAAGCCAAACAGTTCCTCAAAGCACATGTCCCT  
CCAGGACTGTCCAGGTGAAACAGTGGGCTGAGGACTCCAAAGTCACTTTGCTT  
GCCGACCATCCCCACTACCAGGGCTGGGAAGAACAGCCAGCTACACCACTTAAGACT  
ACTCCCGTTCCTCCCTACCGAATGCATCAAAATGTTGTGAAGAAAGCCTGTCTG  
CTGAGCGCCACCGAGGGTCTAGTCACAGACAAGACACTGTACAGTACACAGTGTTC  
CTCCCAACCAGAAACCTGTCCATCAAAAGCCTGTACCTTGCCAAAGTTCCAGAAAG  
CGGGAGCCAGCTGCAGATGACCGTTCCACAGCTTCCCATTTAATTGACGTTTGC  
AGACCAGGAGGTGAACCTGCTCGTAAGCCCTGGTATGCTGGCCTGTGACCCGCAA  
GTTTGTGAAGAGGCCTTGACAGATCCAAACAAGGATGGATCGTTTCTTATTCGGAA  
GAGCTTTGGCCATGATTCCAAGCAGCCGTACACCCCTAGTTGCGTTCCTTAACAAGCG  
AGTGATAAATATTCCTGTACGGTTTATTGAAGCAACCAACAGTATGCTTTGGGAA  
AGAAGAAATAATGGTGAAGAGTACTTCGGAAAGTGTGTGGAATCGTCAACAGTCA  
TCAGCACAAACCCCTGGTCTTATTGACAGTCAGAAATAACAGAAAGATTCCACGAG  
ACTGAATAATGCTGTGAAGGTTTCATAACGATACCAAGTCCAGACATGTCCCTCTG  
TTTCTTCTTTTGAGAAACATCATATTCTGGCTATGACTCCTCAGCAGTAAGAGAGA  
AAAGATGAATGAAGCCACTGAGGCTTCGTGAATGAATCTACTCCTTCTTAGG  
GCGTTCACACGAGCTTTTCTATCACCTGACCTGACGAAGTCATAGCTGGGAGGTTCG  
GTTACTATGATAC



## Schematic of BLNK and BLNK-s.

## BLNK



## BLNK-s



Fig. 7

093544-02399  
66240-42550